



# THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Ronald Jon Lander

Title:

TIME STUDIES CHRONOMETER WITH GENERIC

**ICONS** 

Serial Number:

10/644,694

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Examiner/Unit:

Douglas N. Washburn / 2863

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### CERTIFICATE OF MAILING OR TRANSMISSION

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**APPEAL BRIEF** 

June 13, 2006

Commissioner for Patents P O Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This is an appeal pursuant to 37 CFR § 1.19(a) from the decision of the Examiner, dated January 10, 2006 finally rejecting claims 1-4, 7-16, 21, 22, and 25-32, of the above-referenced patent application.

This brief is filed within three months of the filing of the Notice of Appeal pursuant to 37 CFR § 1.192(a). Accompanying this Brief is an **Amendment filed with Appeal Brief** which puts the claims in better form for the Appeal.

**Real parties in interest:** Independent inventor, Ronald Jon Lander and the small closely held Seattle company: Interval Systems, Inc.

Related appeals and interferences: none

**Status of claims:** All of the appealed claims, 1-4, 7-16, 21, 22, and 25-32 stand rejected.

Status of amendments: Applicant has submitted amendments with this appeal brief to place some of the claims in better form for consideration on appeal and cancel three claims. All previously submitted amendments were previously entered. Applicant submits that the proposed amendments merely improve clarity of the claim language, presenting the claims in better form for consideration on appeal, and none of the claim amendments changes the scope of the claim. The proposed amendments are shown with changes tracked in the next section of this brief and are **not shown** in the appendix of claims which presents the claims as last examined by the examiner.

# Summary of claimed subject matter:

There are 5 claims at issue in this appeal. Proposed amendments to the claim language which were filed with the appeal brief are shown below.

**Claim 1:** A time studies chronometer with a changeable display wherein:

- (a) for each task of a plurality of tasks to be observed tasks, the display presents a plurality of icons, each icon comprising a pictorial representation of a generic task and each icon being a selectable option to describe the a task, and
- (b) the chronometer accepts input from a user to select one of said icons to characterizedescribe the an observed task, and
  - (c) the chronometer accepts input from a user to measure a period of time.

This subject matter is disclosed in the specification in Figures 4 and 5, and in paragraphs 6-7, and 13.

Claim 13: The chronometer of claim 1 wherein data sets collected for each of a plurality of tasks which all have the same generic selected icon are, by using the shared selection, associated together by the chronometer shared icon for subsequent processing together.

This subject matter is disclosed in the specification in paragraphs 10, and 12.

## **Claim 21**. A time studies chronometer with a changeable display wherein:

- (a) for each of a plurality of tasks to be observed, the display presents a plurality of generic task characterization icons, each icon comprising a pictorial representation of a characterization of a task and each icon being suitable for selection to characterize a task, and
- (b) the chronometer accepts input from a user to select one of said task characterization icons, and
  - (c) the chronometer accepts input from a user to measure a period of time.

This subject matter is disclosed in the specification in Figure 6, and in paragraphs 8 and 14.

Claim 25. The chronometer of claim 21 wherein the presented icons include a characterization of value added or no value added.

This subject matter is disclosed in the specification in Figure 6, and in paragraphs 8 and 14.

Claim 31. The chronometer of claim 21 wherein data sets collected for each of a plurality of tasks which all received the same characterization icon are, using the characterization, associated together by the chronometer characterization icon for subsequent processing together.

This subject matter is disclosed in the specification in paragraph 10.

## Grounds of rejection to be reviewed on appeal:

All five of the above claims stand rejected under section 103(a) as unpatentable over Kmack (US 6,304,851) in view of Hallberg et al. "USING MICROSOFT EXCEL 97" published in 1997, pages 31, 252 and 253.

## **ARGUMENT:**

#### The Kmack reference:

Kmack (US 6,304,851) discloses a time studies chronometer, which is the subject of all five of the pending claims. It is appropriate prior art to be cited in this case and, within the knowledge of the undersigned, it is the closest prior art. There is an important element of each of the claims at issue that is not disclosed or suggested by Kmack: the use of icons to present to a user a set of choices for describing or characterizing an activity observed by a person conducting a time study.

The Examiner disagrees with this reading of Kmack. In the middle of page 2 of the last office action, the Examiner asserts that Kmack teaches (in the language of claim 1): "for each of a plurality of observed tasks, a display presents a plurality of icons (buttons: column 8, lines 54-57), each icon comprising a pictorial representation of a generic task and each icon being a selectable option to describe the task".

The Kmack patent does not use the word "icon" anywhere. Unless one were to construe the word "icon" as used in the five claims at issue to encompass any set of pixels on a computer display that might be selected, including sets of pixels that represent the English alphabet characters in the form of written text, the "icons" specified in all five claims cannot be found in Kmack. In the figures of Kmack, each of the options selectable by a user is clearly represented as merely text. Furthermore, the written specification of Kmack suggests no other way of presenting options to users.

A broad enough reading of the word "icon" to encompass the teaching of Kmack would be improper because the specification of the pending application explains

extensively that icons are pictorial representations of physical activities that might be tasks to be studied. The specification makes it clear that the word "icon" excludes mere text. The claims at issue make this perfectly clear by including the words "a pictorial representation of a generic task" (claim 1) or "a pictorial representation of a task" (claim 21).

The portion of Kmack cited by the Examiner does not support his position. When Kmack uses the word "button" (Figure 8, column 8), it is a displayed object consisting of text to be read by a user. At lines 54 – 58 of column 8, Kmack states that "the setup program enables the user to define **the text** in many of the . . . buttons", implying that the inventors and authors of the Kmack patent application did not conceive that there could be anything other than text in a button. (As explained below, Kmack teaches away from the idea of an icon for a button.)

# The second reference for a section 103 rejection:

Of course, if the Examiner's characterization of the disclosure of Kmack were correct, Kmack would be a proper section 102 citation against claim 1. However, the Examiner has chosen to reject claim 1 only under section 103, acknowledging in the middle of page 4 that "Kmack does not **fully** teach an icon comprising a pictorial representation of a generic task".

On the priority date of the present application, there were many examples of prior art computer systems which could be commanded by user selection of an icon comprising a pictorial representation of a task. The Examiner chose one of them for his second reference to make a 103 rejection, a manual that teaches how to use Microsoft Excel. However, the mere existence of such prior art does not provide a motivation or suggestion to modify the system of Kmack to use pictorial representations instead of text for user selectable elements of a user interface for description or characterization of observed tasks in a time study.

Likewise, on the priority date of the Kmack reference in 1998, there were many examples of prior art computer systems which could be commanded by user selection of an icon comprising a pictorial representation of a task. Such user interfaces were widely publicized with the introduction of the Apple MacIntosh computer system more

than 10 years earlier. If it were obvious to add the pictorial icons of the present claims to the Kmack system, Kmack would have done it. (As explained below, Kmack teaches away from this idea.)

Because there is no reference that teaches or suggests or provides a motivation to add the pictorial icons of the present claims to the Kmack system, the section 103 rejection is unsupported and the present claims are allowable.

## Kmack teaches away from the claimed invention

In all the prior art uses of pictorial icons for a user interface, the icons are used to represent a specific task that the user wishes to command the computer system to perform. The applicant is not claiming such a use of icons. That is, he is not claiming the use of icons to command a computer system to perform a task. Although time studies chronometers make use of such user input via icons, there is another need for user input while doing a time study with a time studies chronometer such as disclosed by Kmack: to describe or characterize an observed task performed by another.

As taught by Kmack at lines 15-22 of column 5, in all prior art time studies systems, before doing the actual time study, the operator would create a "list of activities" and then download the list into the chronometer. As Kmack further explains at lines 40-48 of column 8, before doing the time study, the user interfaces are "extensively customized to the time and motion study to which they will be utilized. .... Since the user 18 is provided with customized lists of options or values during data collection, a minimal amount of effort is required on the part of the user to collect data." This level of customization can only be done with words which describe the tasks to be observed. If one attempted to use previously created icons to represent each task, there would be far too many to choose from and it would be too difficult to distinguish them from each other.

#### Claims 1 and 13:

As explained in the present application in paragraphs 5, 6, 9, and 10, the present system takes a different direction from Kmack. Instead of giving the operator the power to greatly customize the choices before a study is commenced, the system reduces setup time required by giving the operator a relatively small number of choices that only

"generically describe a task". Thus, claim 1 and claim 13 which depends from it specify "a pictorial representation of a **generic** task". By requiring the operator to select from a set of generic task icons, the user needs to be presented only a relatively small number of icons, which makes it feasible to use pictorial icons rather than text.

### Claim 13:

Claim 13, which depends from claim 1, further specifies: "data sets collected for each of a plurality of tasks which all have the same generic selected icon are, by using the shared icon, associated together by the chronometer for subsequent processing together." As explained in paragraph 10 of the application, because there are few generic task icons to choose from, each generic task icon will often be used to describe many different tasks in the course of a time study. This allows data from each of these different tasks to be automatically grouped together and presented without the user having to instruct the system which tasks should be grouped for presentation. Because Kmack teaches away from using a generic task descriptor for many tasks, Kmack does not suggest or motivate the invention of claim 13.

#### Claim 21.

Instead of the "icon comprising a pictorial representation of a generic task" as in claim 1, claim 21 specifies a time studies chronometer with "a plurality of generic task characterization icons, each icon comprising a pictorial representation of a characterization of a task". As explained in the specification at paragraph 8, a characterization of a task represents additional information about a task beyond the rather vague information conveyed by selection of a generic task icon. Because the choices of generic icons to describe a task are relatively few, it is advantageous to have a way to gather additional information. Kmack teaches away from this invention because Kmack teaches that one simply adds customization and complexity to the choices presented to the user to address the need to gather additional information.

#### Claim 25.

Claim 25 depends from claim 21 and further specifies that "the presented icons include a characterization of value added or no value added." This specific characterization is not taught by Kmack

# Claim 31.

This claim is analogous to claim 13. The data sets collected for each of a plurality of tasks which all received the same characterization icon are, using the characterization, associated together by the chronometer for subsequent processing together. Again, the use a relatively small number of possible characterizations such that each characterization will be used for many different tasks allows the automatic generation of reports without the user being required to designate a grouping. This is not taught by Kmack.

Claims appendix (Amendments proposed with the appeal brief are not shown)

- 1. (Previously amended) A time studies chronometer with a changeable display wherein:
- (a) for each task of a plurality of observed tasks, the display presents a plurality of icons, each icon comprising a pictorial representation of a generic task and each icon being a selectable option to describe the task, and
- (b) the chronometer accepts input from a user to select one of said icons to characterize the task.
- 2. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 1.
- 3. (original) The data carrier of claim 2 wherein the data carrier is a memory device.
- 4. (original) The data carrier of claim 2 wherein the data carrier is an electronic signal.
- 5. (cancelled)
- 6. (cancelled)
- 7. (previously amended) The chronometer of claim 1 wherein one of the icons represents an unknown task and selection of this icon by the user allows the user to enter a textual description of the task.
- 8. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 7.
- 9. (previously amended) The chronometer of claim 1 wherein the icons are loaded into a memory of the chronometer by copying from an external memory coupled to the chronometer.
- 10. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 9.

- 11. (previously amended) The chronometer of claim 1 wherein the icons are presented on a touch screen and the input from a user is accepted from the touch screen.
- 12. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 11.
- 13. (previously amended) The chronometer of claim 1 wherein data sets collected for each of a plurality of tasks which all have the same generic selected icon are associated together by the shared icon for subsequent processing together.
- 14. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 13.
- 15. (previously amended) The chronometer of claim 1 further comprising means for subsequent processing of collected time data by computing at least one of the range, distribution, standard deviation, mean, or median.
- 16. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 15.
- 17. 20. (cancelled)
- 21. (previously amended) A time studies chronometer with a changeable display wherein:
- (a) for each of a plurality of tasks to be observed, the display presents a plurality of generic task characterization icons, each icon comprising a pictorial representation of a characterization of a task and each icon being suitable for selection to characterize a task, and
- (b) the chronometer accepts input from a user to select one of said task characterization icons.
- 22. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 21.
- 23. (cancelled)

- 24. (cancelled)
- 25. (original) The chronometer of claim 21 wherein the presented icons include a characterization of value added or no value added.
- 26. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 25.
- 27. (previously amended) The chronometer of claim 21 wherein the presented icons include a characterization of a method of inspection wherein the icons comprise representations of sight, touch, and device.
- 28. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 27.
- 29. (previously amended) The chronometer of claim 21 wherein the optional characterization icons are loaded into a memory of the chronometer by copying from an external memory coupled to the chronometer.
- 30. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 29.
- 31. (previously amended) The chronometer of claim 21 wherein data sets collected for each of a plurality of tasks which all received the same characterization icon are associated together by the characterization icon for subsequent processing together.
- 32. (original) A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 31.

Claims 33 – 94 (canceled)

Evidence appendix: None

Related proceedings appendix: None

Conclusion

For the foregoing reasons, the Applicant requests the Board to reverse the Examiner's rejection of claims 1-4, 7-16, 21, 22, and 25-32 under 35 USC § 103, and remand the application for issuance as to claims 1-4, 7-16, 21, 22, and 25-32.

Should further payment be required to cover such fees you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

DATED this 13<sup>th</sup> day of June, 2006.

Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP

Jeffrey T. Haley Registration No. 34,834

Attorneys for Applicant

155-108th Avenue NE, Ste 350

Bellevue, WA 98004-5901

(425) 455-5575

**Enclosures:** 

Amendment filed with Appeal Brief